

NAVAL POSTGRADUATE SCHOOL MONTEREY, CALIFORNIA



THESIS

**USING PERFORMANCE MEASURES AND
INDICATORS TO ASSESS THE QUALITY
OF CUSTOMER SERVICE PROVIDED TO
THE MARINE CORPS BY THE DEFENSE
FINANCE AND ACCOUNTING SERVICE**

by

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Keith Wayne Bass

December 1995

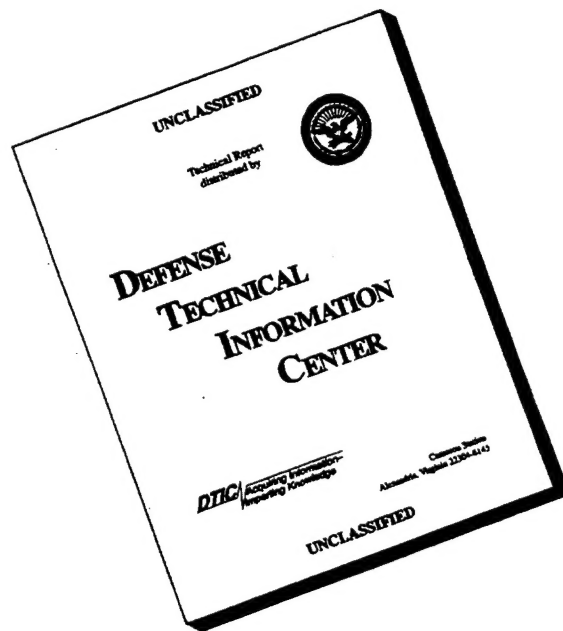
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**USING PERFORMANCE MEASURES AND INDICATORS TO ASSESS THE
QUALITY OF CUSTOMER SERVICE PROVIDED TO THE MARINE
CORPS BY THE DEFENSE FINANCE AND ACCOUNTING SERVICE**

Keith Wayne Bass
Major, United States Marine Corps
B.S., University of South Carolina, 1984

Submitted in partial fulfillment
of the requirements for the degree of

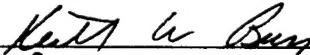
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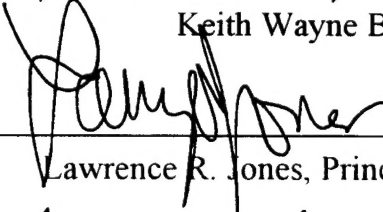
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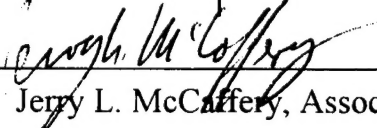


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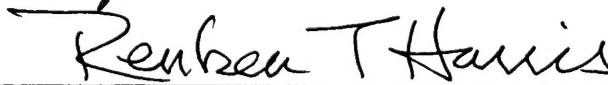
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ABSTRACT

This thesis identifies the potential for using performance measures and indicators to assess the quality of customer service provided to the Marine Corps by the Defense Finance and Accounting Service (DFAS) in the functional areas of finance and accounting. Five functional areas were analyzed in the study; Military Pay, Civilian Pay, Travel Payments, Contractor and Vendor Pay, and General Accounting.

Key personnel from Headquarters Marine Corps and various comptrollers throughout the Marine Corps were surveyed to determine what performance criteria Marine Corps commanders and financial managers define as the critical components of customer service in the functional areas of finance and accounting. This information, coupled with the concept and principles of performance measurement, led to the development of a list of performance measures and indicators that the Marine Corps could use to effectively and efficiently assess the quality of customer service that DFAS provides to the Marine Corps in the functional areas of finance and accounting. Recommendations for the implementation of a performance measurement program are included.

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I. INTRODUCTION

A. BACKGROUND

The Defense Finance and Accounting Service (DFAS) was established in January 1991. In December 1991, the Deputy Secretary of Defense issued a Defense Management Report Decision (DMRD) on the consolidation of Department of Defense (DoD) accounting and finance operations. This DMRD directed DFAS to: (1) capitalize the finance and accounting functions of the DoD components by October 1, 1992; (2) assume responsibility for all finance and accounting regionalization / consolidation efforts throughout the Department of Defense; and (3) establish an implementation group, with senior representatives from the DoD components to develop an implementation plan for submission to the DoD Comptroller [Ref. 1:p. ES-1].

The DFAS Implementation Plan for Consolidation of DoD Accounting and Finance Operations, issued in July 1992, included a requirement for DFAS, *in partnership with the military departments*, to implement a standard, continuous performance and quality measurement process. This requirement was designed to assure military commanders and financial managers that DFAS would provide quality and responsive service to all DoD components. [Ref. 1:p. 51]

The Director of DFAS tasked the Operational Review and Measurement Directorate with developing Performance Measures and Indicators (PMI) to assist in the internal management control of the organization. However, to date, the Marine Corps has not been asked by DFAS to assist in the development of any specific performance and quality measures as required by the Implementation Plan for Consolidation of DoD Accounting and Finance Operations.

Accordingly, Marine Corps commanders and financial managers do not currently possess an effective and efficient means of assessing the quality of service that they are receiving from DFAS.

B. OBJECTIVES

The objective of this thesis is to develop a set of performance measures and indicators that the Marine Corps can use to effectively and efficiently assess the quality of service that DFAS is providing to the Marine Corps in the functional areas of finance and accounting.

C. THE RESEARCH QUESTION

The primary research question that this thesis seeks to answer is "What performance measures and indicators should the Marine Corps use to effectively and efficiently assess the quality of service that DFAS is providing to the Marine Corps in the functional areas of finance and accounting." A subsidiary research question is "What performance criteria do Marine Corps commanders and financial managers define as the critical components of customer service within the functional areas of finance and accounting."

D. METHODOLOGY

The methodology of the research is primarily deductive. The strategies employed include both analytic and anecdotal data. By surveying and interviewing key personnel from Headquarters Marine Corps and the Comptrollers from various Marine Corps bases and stations, this research identifies the performance criteria that Marine commanders and financial managers define as the critical components of customer service within the functional areas of finance and accounting. Interviews conducted with DFAS representatives from the Customer Service and Performance

Assessment Directorate provided information on the current DFAS performance measurement program and its capabilities and limitations.

Combining knowledge of the concept of performance measurement with the responses from written surveys and interviews with key personnel from Headquarters Marine Corps and the Comptrollers from various Marine Corps bases and stations, this thesis identifies a set of performance measures and indicators that the Marine Corps can use to effectively and efficiently assess the quality of service that DFAS is providing to the Marine Corps in the functional areas of finance and accounting.

E. ORGANIZATION

Chapter II contains a discussion of the concept of performance measurement. The different types of performance measures are identified and discussed. The benefits of measuring DFAS performance to the Marine Corps, and secondarily to DFAS, are identified. In addition, the importance of monitoring the collection of performance data is discussed.

Chapter III examines the DFAS performance measurement program and its current capabilities and limitations.

Chapter IV examines the performance measures and indicators developed by DFAS for its internal use. An explanation of the process used in this thesis to develop a set of recommended performance measures and indicators is provided. In addition, the results of the survey of Marine Corps comptrollers that was conducted as part of the research for this thesis are discussed. This chapter also identifies, discusses, and defines the performance measures and indicators determined to be the most useful to Marine Corps commanders and financial managers in assessing the quality of service provided by DFAS in the functional areas of finance and accounting.

Chapter V contains the conclusions of the study and recommendations for the implementation of a performance measurement program. Suggested topics for future study are also provided.

II. BACKGROUND

A. PERFORMANCE MEASUREMENT

Performance measurement attempts to assess behavior and productivity in organizations in an effort to assess the overall performance of the organization. In addition, performance measures and indicators work internally to focus the organization on achieving its strategic goals. Performance measurement typically includes measures of productivity, effectiveness, efficiency, quality and timeliness. "Performance measures/indicators measure the quantity and accuracy of the work produced by a work unit, the efficiency with which it is produced, the level of customer satisfaction achieved, and the financial position of the work unit processing the workload or providing the service" [Ref. 2:p. 5]. Private sector firms have traditionally relied on financial measures of corporate performance. However, in recent years there has been concern that "traditional financial measures of corporate performance do not provide sufficient information about investments in vital intangibles, such as intellectual capital and processes to improve quality and customer satisfaction" [Ref. 3:p. 9]. Accordingly, many firms in the private sector are developing performance measures and indicators to augment the more traditional financial measures.

Several initiatives currently underway in the federal government have renewed interest in the topic of performance measurement in the public sector. Vice President Albert Gore's National Performance Review and the Government Performance and Results Act (GPRA), Public Law 103-62, are two such initiatives. In accordance with the GPRA, in 1997 as part of their budget submission for fiscal year 1999, each agency will be required to develop a detailed performance plan specifying "objective, quantifiable, and measurable standards and goals expected to be achieved" [Ref. 4].

The performance plan required by the GPRA will establish performance indicators to be used in measuring or assessing the relevant outputs, service levels, and outcomes of each program activity [Ref. 4]. It is important to understand that performance measurement in the public sector is quite different from performance measurement in the private sector. In the private sector, profit and stock prices provide perhaps the ultimate indications of organizational performance. In the public sector, however, no such profit motive exists. Accordingly, it is important to judge the performance of a public organization against the purpose for which the public program exists and the goals of the organization [Ref. 5:p. 2]. This, however, is not as simple or as easy as it sounds. Government agencies frequently perform and respond to various incentives on various levels and issues, including political incentives. This can lead to disagreement or confusion between various government and management entities over the actual mission or goals of a public agency. Therefore, it is important for government agencies to develop consensus on their actual mission and goals and to negotiate these with Executive branch control agents, such as the President's Office of Management and Budget (OMB) and key elected officials and committees in Congress, before performance measurement or performance-based budgeting can be implemented.

If consensus on organization mission can be reached, and if the goals and objectives of the organization have been identified, the next step is to design systems that provide the data for use in performance measurement. These systems provide the agency with the information necessary to allow managers, and others, to evaluate the organization's progress toward meeting its objectives. Accordingly, reliability and the security of data are crucial considerations in the development of a data collection system.

For the purposes of this thesis, it is imperative that the Marine Corps and DFAS reach consensus on the mission and goals of DFAS and to negotiate acceptable levels of customer service and performance. Failure to reach consensus on the goals of DFAS, will likely result in DFAS working towards the achievement of one set of goals and the Marine Corps attempting to measure the success of DFAS in achieving what the Marine Corps perceives as the goals of DFAS. This can be particularly frustrating if the perceived goals are not compatible, e.g., the Marine Corps may believe that DFAS should be providing extremely accurate and responsive support regardless of cost, and DFAS may believe that it should be the lowest cost service provider. Similarly, failure to negotiate acceptable levels of customer service may result in the misallocation of resources as DFAS attempts to achieve its own targeted performance levels which may differ significantly from the needs of the Marine Corps.

B. TYPES OF PERFORMANCE MEASURES

Performance measures may be divided into four categories; inputs, outputs, workloads, and outcomes.

Inputs represent the resources consumed by the operation of a government program. Ultimately, they are used to hire personnel, build facilities, contract for services, and so on. Inputs are easily measured, usually in terms of dollars or personnel (e.g., full-time equivalents or end strength). They are necessary for the achievement of objectives, but the question of *how many* inputs are required typically is difficult to determine. [Ref. 5:p. 3]

Workload is defined as the amount of work performed, typically measured in terms of quantity. Workload measures are often referred to as activity or process measures.

Outputs are the results of agency work and activities. Output measures are distinguished from workload measures in that workload is the *amount* of work performed and output is the *result* of that work. Outputs produced may not be sufficient for the agency to achieve its objectives, however, they are necessary for the agency to attempt to do so [Ref. 5:p. 3]. Unlike inputs, outputs are often difficult to translate into dollars partly because a market for agency activities may not exist outside of the government and they are difficult to measure.

Outcomes represent the degree of customer satisfaction and achievement of the broader goals of an agency. Outcome measurement concerns the extent to which the activities and outputs of the agency have their intended effect. That is, it focuses not only on the work performed but, more importantly, on the results of that work. Outcome measurements may cover activities that are largely under the control of program managers, or they may extend to an even broader set of measures (often called measures of impact) representing results that the agency may influence, but does not achieve or control on its own. [Ref. 5:p. 3]

Although outcome measures are the most meaningful measures regarding the success of an agency, they are also the most difficult to design. Alternatively, the easiest measures to capture reliably are input and workload measures. While these measures of resources consumed and work accomplished are essential in evaluating an agency's performance, unless the precise linkage between an agency's activity and program results is clear, measuring only inputs, outputs and workload will not provide a full understanding of the true results of a program or the degree of its goal satisfaction [Ref. 5:p. 5].

C. IMPORTANCE OF MONITORING DATA COLLECTION EFFORTS

Caution should be exercised to monitor the appropriateness and accuracy of the performance measurements reported and the data used to develop them. This is

necessary because those who typically produce or use performance data may have an incentive to misreport or fail to report altogether [Ref. 5:p. 7]. This is most true in instances where the employee or manager believes that the performance data may be used to punish them, to withdraw financial resources, or generally that it may reflect unfavorably upon their performance and raise questions related to the need for the program or agency. The potential for this type of data manipulation is greatest when a manual data collection system is employed, due to the increased level of human intervention.

D. BENEFIT OF A PERFORMANCE MEASUREMENT PROGRAM

The primary benefit that the Marine Corps could receive by implementing a performance measurement program designed to monitor the quality of service that DFAS provides in the functional areas of finance and accounting is assurance that DFAS is providing a quality and responsive service. Marine commanders and financial managers can monitor performance measures and indicators to ensure that their commands are receiving the level, types, amount, and quality of service they require, and Headquarters Marine Corps can ensure that the Marine Corps, as a whole, is receiving the service for which it has contracted and paid. Additionally, and of perhaps greater utility, the Marine Corps may use these performance measures and indicators to *tailor* support requirements and to *negotiate* support costs with DFAS.

DFAS also benefits from this program. If the Marine Corps develops a program to measure DFAS performance in what the *Marine Corps* determines are the *key* areas of customer service in the finance and accounting functional areas, *DFAS can concentrate its efforts in those areas that its customer believes to be the most important*. In this case, DFAS would spend less time, effort, and resources on issues that are of little or no value to it or to the Marine Corps.

III. THE DFAS PERFORMANCE MEASUREMENT ORGANIZATION

A. ORGANIZATION STRUCTURE

The DFAS Operational Review and Measurement Directorate is responsible for the development and reporting of Performance Measures and Indicators (PMI) for the Defense Finance and Accounting Service (DFAS). The Operational Review and Measurement Directorate reports to the Deputy Director, Customer Service and Performance Assessment at DFAS headquarters who, in turn, reports to the Director of DFAS. DFAS Headquarters is located in Crystal City, Virginia. The Operational Review and Measurement Directorate, while considered part of DFAS Headquarters, is physically located at the DFAS-Indianapolis Center, at Fort Benjamin Harrison, Indiana. In addition to the Operational Review and Measurement Directorate, the Customer Service and Assessment Directorate also reports to the Deputy Director, Customer Service and Performance Assessment. However, despite the fact that they report to the same Deputy Director, interviews conducted with DFAS headquarters personnel revealed that the two Directorates are not currently engaged in any joint efforts to utilize performance measurement to assess the quality of customer service that DFAS provides, and to report the results to DFAS customers. Performance measurement is used by DFAS as a purely internal management tool and the results are not shared with customers. Instead, DFAS customers are surveyed by the Customer Service and Assessment Directorate to assess the customer's *perception* of DFAS performance. The DFAS Customer Service Plan issued in August of 1995, provides examples of the performance measures and indicators that DFAS uses to assess its own performance, however, the actual results of these measures and indicators are not reported to DFAS customers.

B. DATA COLLECTION SYSTEM

The system used to collect the raw data used to develop the performance measures and indicators that DFAS uses is primarily a manual one. Each of the DFAS centers collects the performance data for all of the Operating Locations (OPLOC) and Defense Accounting Offices (DAO) under its jurisdiction and forwards the data to the Operational Review and Measurement Directorate. The Centers only report raw data. They are not authorized to perform the calculation of any performance measures and indicators. DFAS officials believe that this lessens the temptation for the centers to manipulate the data elements in an effort to improve the appearance of their performance. False or misreported data, however, is an inherent weakness in a manual data collection system. Previous efforts to automate the collection of performance measurement data were thwarted by change and volatility in the list of performance measures and indicators, and the lack of standard payment systems used by the centers, OPLOCs, and DAOs. Accordingly, the plan to develop an automated data collection system to interface with DFAS payment systems has been postponed until all migratory pay systems have been installed. This action is not expected to be completed for several years. It is also anticipated that by the time the migratory pay systems are installed, the list of performance measures and indicators will also have stabilized.

C. DATA AGGREGATION

DFAS currently aggregates its data for PMI calculation across all DFAS customers. This is due to the focus of the DFAS performance measurement program as an internal management tool. Accordingly, it is impossible for any single customer to determine the level of support it *specifically* is receiving from DFAS using this data. The current system can only provide overall results which limits its usefulness as a customer service measurement tool. The level of aggregation needed by the

customer is an important issue to be considered when developing a data collection system for performance measurement. The needs of the various DFAS customers must be considered in order to develop a system capable of providing the information that the customer requires.

D. DATA DEFINITIONS

The Operational Review and Measurement Directorate is currently in the process of defining the data elements to be used in the calculation of PMIs. Differences in data definitions used by the different centers, OPLOCs, and DAOs create significant accuracy and reliability problems for performance measurement. For instance, one center may define "written inquiries" as letters only, while another may include, E-mail messages as well. This discrepancy would result in the inaccurate reporting of any performance measure or indicator that used this data element. The problem stems from the use of different pay systems by the different services and the diverse needs of each service. This problem will continue until either all parties agree on data definitions or an automated data collection system that interfaces with standard payment systems is developed and installed.

E. REPORTING PLAN

Currently, performance measures and indicators are reported by the Operational Review and Measurement Directorate to the Director of DFAS only, via the Deputy Director, Customer Service and Performance Assessment. The report is purely an internal management tool for the use of the Director of DFAS. As stated earlier, there is currently no initiative for DFAS to report the results of its internal performance assessment to its customers.

Currently, DFAS monitors 136 PMIs and reports the results to the Director of DFAS on a quarterly basis. The Director of DFAS has identified 43 of these PMIs as "significant" and has directed that they be reported monthly. The Director of

DFAS uses the term "significant" to identify those measures that he feels either monitor problem areas requiring management attention, are management control items that he is particularly interested in, or provide workload figures that he is frequently asked to provide to other officials. Table 3.1 contains a listing of the current DFAS performance measures and indicators [Ref. 6]. Significant PMIs are annotated with an asterisk in column 4. The first monthly report of DFAS performance measures and indicators was issued in October 1995 using August 1995 data. The first quarterly report is expected to be issued in December 1995 for the August through October 1995 quarter. The report primarily consists of bar-charts that depict DFAS performance trends and includes spreadsheet data for the 43 PMIs determined to be "significant" by the Director or DFAS.

PMI Number	Functional Area	PERFORMANCE MEASUREMENT INDICATOR	Significant PMI #	Frequency	Source
1	BUSINESS ACCOUNTING	DBOF Accounting Reports Produced That Contain All Required Data (%)		Q	Ctrs
2	BUSINESS ACCOUNTING	DBOF Accounting Reports Produced Without Major Errors (%)		Q	Ctrs
3	BUSINESS ACCOUNTING	Non-Standard General Ledgers Converted to DoD General Ledger (%)		Q	Ctrs
4	BUSINESS ACCOUNTING	Timeliness of DBOF Departmental Accounting Reports - External (%)	*	M	DFAS-IN
5	BUSINESS ACCOUNTING	Timeliness of DBOF Departmental Accounting Reports - External (Average Days Late)	*	M	DFAS-IN
6	BUSINESS ACCOUNTING	Timeliness of DBOF Departmental Accounting Reports - Internal (%)	*	M	DFAS-IN
7	BUSINESS ACCOUNTING	Timeliness of DBOF Departmental Accounting Reports - Internal (Average Days Late)	*	M	DFAS-IN
8	CIVILIAN PAY	Active Accounts Maintained (DCPS, DBMS, Other) (#)		M	Ctrs
9	CIVILIAN PAY	Civilian Accounts per Employee in the Payroll Operations (DCPS & DBMS only) (#)		M	Ctrs
10	CIVILIAN PAY	Permanent Payroll Changes Processed (#)		Q	Ctrs
11	CIVILIAN PAY	Special Payments Made (DCPS and DBMS only) (%)		M	Ctrs
12	CIVILIAN PAY	Timeliness of Pay-Effecting Transactions (%)		M	Ctrs
13	CIVILIAN PAY	Timeliness of Retirement Records to OPM (DCPS and DBMS only) (%)	*	M	Ctrs
14	CIVILIAN PAY	Withholding Allotment Changes Processed (#)		Q	Ctrs
15	CONTRACT/VENDOR PAY	Backlog of Invoices/Transportation Vouchers (#)		M	OHBR
16	CONTRACT/VENDOR PAY	Commissary Payments Made by Delivery Ticket Invoice (DTI) Method (%)	*	M	DFAS-CO
17	CONTRACT/VENDOR PAY	Commissary Vouchers Paid (#)		M	DFAS-CO
18	CONTRACT/VENDOR PAY	Contract Modifications Processed (Local Procurement) (#)		Q	Ctrs
19	CONTRACT/VENDOR PAY	Contract Modifications Processed (MOCAS) (#)		Q	DFAS-CO
20	CONTRACT/VENDOR PAY	Contract Reconciliations and Closeouts (MOCAS) (#)	*	M	DFAS-CO
21	CONTRACT/VENDOR PAY	Contracts Closed (Local Procurement) (#)		Q	Ctrs
22	CONTRACT/VENDOR PAY	Cost Vouchers Processed (#)		M	Ctrs
23	CONTRACT/VENDOR PAY	Discounts Lost Subject to the Prompt Payment Act (#)	*	Q	HQ/FC
24	CONTRACT/VENDOR PAY	Discounts Lost Subject to the Prompt Payment Act (\$)	*	Q	HQ/FC
25	CONTRACT/VENDOR PAY	Discounts Taken Subject to the Prompt Payment Act (#)		Q	HQ/FC
26	CONTRACT/VENDOR PAY	Discounts Taken Subject to the Prompt Payment Act (\$)		Q	HQ/FC
27	CONTRACT/VENDOR PAY	Discounts Taken Subject to the Prompt Payment Act (%)		Q	HQ/FC
28	CONTRACT/VENDOR PAY	Invoices / Transportation Vouchers On Hand (#)		M	OHBR
29	CONTRACT/VENDOR PAY	Disbursements Made (#)		Q	HQ/FC
30	CONTRACT/VENDOR PAY	Disbursements Made (\$)		Q	HQ/FC
31	CONTRACT/VENDOR PAY	Disbursements Made Subject to the Prompt Payment Act (\$)		Q	HQ/FC

Table 3.1. Current DFAS Performance Measures and Indicators

PMI Number	Functional Area	PERFORMANCE MEASUREMENT INDICATOR	Significant PMI #	Frequency	Source
32	CONTRACT/VENDOR PAY	Electronic Data Interchange (EDI) Invoices Received (#)		M	Ctrs
33	CONTRACT/VENDOR PAY	Electronic Data Interchange (EDI) Invoices Received (\$)		M	Ctrs
34	CONTRACT/VENDOR PAY	Electronic Data Interchange (EDI) Invoices Received (%)	*	M	Ctrs
35	CONTRACT/VENDOR PAY	Electronic Funds Transfer (EFT) Payments (#)		M	Ctrs
36	CONTRACT/VENDOR PAY	Electronic Funds Transfer (EFT) Payments (\$)		M	Ctrs
37	CONTRACT/VENDOR PAY	Electronic Funds Transfer (EFT) Payments (%)	*	M	Ctrs
38	CONTRACT/VENDOR PAY	Interest Penalties Paid Subject to the Prompt Payment Act (#)	*	Q	HQ/FC
39	CONTRACT/VENDOR PAY	Interest Penalties Paid Subject to the Prompt Payment Act (\$)	*	Q	HQ/FC
40	CONTRACT/VENDOR PAY	Interest Penalties Paid Subject to the Prompt Payment Act (%)	*	Q	HQ/FC
41	CONTRACT/VENDOR PAY	Invoices/Transportation Vouchers Processed for Payment (#)		Q	HQ/FC
42	CONTRACT/VENDOR PAY	Late Payments Subject to the Prompt Payment Act (#)		Q	HQ/FC
43	CONTRACT/VENDOR PAY	Late Payments Subject to the Prompt Payment Act (\$)		Q	HQ/FC
44	CONTRACT/VENDOR PAY	Late Payments Subject to the Prompt Payment Act (%)		Q	HQ/FC
45	CONTRACT/VENDOR PAY	Overage Invoices on Hand (#)	*	M	OHBR
46	CONTRACT/VENDOR PAY	Overage Invoices on Hand (%)	*	M	OHBR
47	CONTRACT/VENDOR PAY	Overpayments - MOCAS (#)	*	M	DFAS-CO
48	CONTRACT/VENDOR PAY	Overpayments - MOCAS (\$)	*	M	DFAS-CO
49	CONTRACT/VENDOR PAY	Prevalidation of Payment Transactions (#)	*	M	HQ/FC
50	CONTRACT/VENDOR PAY	Prevalidation of Payment Transactions (\$)	*	M	HQ/FC
51	CONTRACT/VENDOR PAY	Progress Payments Processed (#)		M	Ctrs
52	CONTRACT/VENDOR PAY	Timeliness of Contract/Vendor Invoice Payments (%)		Q	Ctrs
53	CONTRACT/VENDOR PAY	Timeliness of Cost Voucher Payments (%)		Q	Ctrs
54	CONTRACT/VENDOR PAY	Timeliness of Progress Payments (%)		Q	Ctrs
55	CUSTOMER SERVICE	Business Areas with Customer Service Standards (%)		Q	Ctrs
56	CUSTOMER SERVICE	Identified Internal Management Control Material Weaknesses (#)		Q	Ctrs
57	CUSTOMER SERVICE	Internal Management Control (IMC) FMFIA Section 2 Material Weaknesses Corrected by Established Target Date (%)		Q	Ctrs
58	CUSTOMER SERVICE	Situation Reports (SITREPS) Received and Tracked (#)		Q	HQ/PA
59	CUSTOMER SERVICE	Suspected Fraud Cases Reported (#)		Q	Ctrs
60	CUSTOMER SERVICE	Fraud Cases in Process (#)	*	M	Ctrs
61	DEBT MANAGEMENT	New Cases (#)		Q	Ctrs

Table 3.1 (Continued)

PMI Number	Functional Area	PERFORMANCE MEASUREMENT INDICATOR	Significant PMI #	Frequency	Source
62	DEBT MANAGEMENT	Unanswered Protests on Hand (#)		Q	Ctrs
63	DISBURSING	Collections Made (#)		M	Ctrs
64	DISBURSING	Collections Made (\$)		M	Ctrs
65	DISBURSING	Debit Vouchers On Hand at End of Month (#)	*	M	Ctrs
66	DISBURSING	Debit Vouchers On Hand at End of Month (\$)	*	M	Ctrs
67	DISBURSING	Payments Made (#)		M	Ctrs
68	DISBURSING	Payments Made (\$)		M	Ctrs
69	DISBURSING	Reported Loss of Funds-Cases (#)	*	M	Ctrs
70	DISBURSING	Reported Loss of Funds Cases (\$)	*	M	Ctrs
71	DISBURSING	Savings Bonds Issued (#)		Q	Ctrs
72	GARNISHMENT	Court Orders Honored for Payment (#)		M	DFAS-CL
73	GARNISHMENT	Court Orders Honored for Payment (%)	*	M	DFAS-CL
74	GARNISHMENT	Court Orders Received (#)		M	DFAS-CL
75	GARNISHMENT	Overage Court Orders on Hand (%)	*	M	DFAS-CL
76	GARNISHMENT	Timeliness of Child Support and Alimony Garnishment Processing (%)		M	DFAS-CL
77	GARNISHMENT	Timeliness of Commercial Garnishments for Civilians Processed (%)		M	DFAS-CL
78	GARNISHMENT	Timeliness of Commercial Involuntary Allotment Garnishments Processed (%)		M	DFAS-CL
79	GARNISHMENT	Timeliness of Former Spouse Applications (%)		M	DFAS-CL
80	GENERAL ACCOUNTING	Accounts Reported in a Deficit Status (#)	*	M	HQ/GB
81	GENERAL ACCOUNTING	Payments Pending for Accounts in Deficit Status (#)	*	M	HQ/GB
82	GENERAL ACCOUNTING	Payments Pending for Accounts in Deficit Status (\$)	*	M	HQ/GB
83	GENERAL ACCOUNTING	Aged Negative Unliquidated Obligations (NULOs) - (#)	*	M	HQ/GE
84	GENERAL ACCOUNTING	Aged Negative Unliquidated Obligations (NULOs) - (\$)	*	M	HQ/GE
85	GENERAL ACCOUNTING	Aged Unmatched Disbursements (#)	*	M	HQ/GE
86	GENERAL ACCOUNTING	Aged Unmatched Disbursements (\$)	*	M	HQ/GE
87	GENERAL ACCOUNTING	Antideficiency Act Violations Reported (#)		Q	Ctrs
88	GENERAL ACCOUNTING	Contract Obligation Authority (\$)		Q	Ctrs
89	GENERAL ACCOUNTING	Timeliness of Departmental Accounting Reports - Internal (%)	*	M	Ctrs
90	GENERAL ACCOUNTING	Timeliness of Departmental Accounting Reports - Internal (Average Days Late)	*	M	Ctrs
91	GENERAL ACCOUNTING	Timeliness of Departmental Accounting Reports - External (%)	*	M	Ctrs
92	GENERAL ACCOUNTING	Timeliness of Departmental Accounting Reports - External (Average Days Late)	*	M	Ctrs

Table 3.1 (Continued)

PMI Number	Functional Area	PERFORMANCE MEASUREMENT INDICATOR	Significant PMI #	Frequency	Source
93	GENERAL ACCOUNTING	Unliquidated Obligations in Closing Accounts (ULOs) (#)		Q	Ctrs
94	GENERAL ACCOUNTING	Unliquidated Obligations in Closing Accounts (ULOs) (\$)		Q	Ctrs
95	MANAGEMENT INFO	Workforce Assigned - Civilian/Military (#)		Q	HQ/CM
96	MANAGEMENT INFO	Workforce Authorized - Civilian/Military (#)		Q	HQ/CM
97	MANAGEMENT INFO	Military Personnel in the Workforce (%)		Q	HQ/HC
98	MANAGEMENT INFO	Minorities in the Workforce (%)		Q	HQ/HE
99	MANAGEMENT INFO	Physically Challenged Employees in the Workforce (%)		Q	HQ/HE
100	MANAGEMENT INFO	Women in the Workforce (%)		Q	HQ/HE
101	MANAGEMENT INFO	Workforce Turnover - Civilian and Military (%)		Q	HQ/CM
102	MANAGEMENT INFO	Congressional Inquiries (#)		Q	HQ/CE & Ctrs
103	MANAGEMENT INFO	Timeliness of Responses to Congressional Inquiries (%)		Q	HQ/CE & Ctrs
104	MANAGEMENT INFO	White House Inquiries (#)		Q	HQ/CE & Ctrs
105	MANAGEMENT INFO	Timeliness of Responses to White House Inquiries (%)		Q	HQ/CE & Ctrs
106	MANAGEMENT INFO	System Change Requests (SCRs) Completed (#)		Q	Ctrs
107	MILITARY - ACTIVE	Active Component Military Pay Accounts Maintained (#)		M	Ctrs
108	MILITARY - ACTIVE	Active Component Military Pay Accounts per Employee in Military Pay Operations (#)		M	Ctrs
109	MILITARY - ACTIVE	Overpaid/In Debt Accounts at Separation (%)	*	M	Ctrs
110	MILITARY - ACTIVE	Pay Instruments Delivered (%)		M	Ctrs
111	MILITARY - ACTIVE	Pay-Effecting Transactions Processed on Time (#)		M	Ctrs
112	MILITARY - ACTIVE	Timeliness of Pay-Effecting Transactions (%)		M	Ctrs
113	MILITARY - ACTIVE	Timeliness of Responses to Written Inquiries (%)		M	Ctrs
114	MILITARY - ANNUITANT	Annuity Accounts Maintained (#)		M	DFAS-DE
115	MILITARY - ANNUITANT	Pay Instruments Delivered (%)		M	DFAS-DE
116	MILITARY - ANNUITANT	Account Establishment Transactions Processed on Time (#)		M	DFAS-DE
117	MILITARY - ANNUITANT	Timeliness of All Accounts Established (%)	*	M	DFAS-DE
118	MILITARY - ANNUITANT	Timeliness of Adjustment Transactions (%)		M	DFAS-DE
119	MILITARY - RESERVE	Overpaid/In Debt Accounts at Separation (%)		M	Ctrs
120	MILITARY - RESERVE	Pay Instruments Delivered (%)	*	M	Ctrs

Table 3.1 (Continued)

PMI Number	Functional Area	PERFORMANCE MEASUREMENT INDICATOR	Significant PMI #	Frequency	Source
121	MILITARY - RESERVE	Reserve Component Military Pay Accounts Maintained (#)		M	Ctrs
122	MILITARY - RESERVE	Reserve Component Military Pay Accounts per Employee in Military Pay Operations (#)		M	Ctrs
123	MILITARY - RESERVE	Pay-Effecting Transactions Processed on Time (#)		M	Ctrs
124	MILITARY - RESERVE	Timeliness of Pay-Effecting Transactions (%)		M	Ctrs
125	MILITARY - RETIRED	Arrears of Pay (%)		M	DFAS-CL
126	MILITARY - RETIRED	Pay Instruments Delivered (%)		M	DFAS-CL
127	MILITARY - RETIRED	Retired Accounts Maintained (#)		M	DFAS-CL
128	MILITARY - RETIRED	Terminated Retirement Benefits (Deceased) (#)		M	DFAS-CL
129	MILITARY - RETIRED	Account Establishment Transactions Processed on Time (#)		M	DFAS-CL
130	MILITARY - RETIRED	Timeliness of All Accounts Established (%)	*	M	DFAS-CL
131	MILITARY - RETIRED	Timeliness of Adjustment Transactions (%)		M	DFAS-CL
132	MILITARY - RETIRED	Timeliness of Responses to Written Inquiries (Average Number of Days)		M	DFAS-CL
133	TRAVEL	Travel Advances (Cash or Check) (#)		Q	Ctrs
134	TRAVEL	Travel Voucher Timeliness (TDY) (%)	*	M	Ctrs
135	TRAVEL	Travel Vouchers On Hand (#)		M	OHBR
136	TRAVEL	Travel Vouchers Processed (#)		M	Ctrs

Table 3.1 (Continued)

IV. PERFORMANCE MEASURES AND INDICATORS FOR THE FUNCTIONAL AREAS OF FINANCE AND ACCOUNTING

A. CURRENT DFAS PERFORMANCE MEASURES AND INDICATORS

Currently, the Operational Review and Measurement Directorate monitors 136 Performance Measures and Indicators (PMI) for the functional areas of finance and accounting. The results of this assessment are reported to the Director of DFAS on a quarterly basis. Additionally, the Director of DFAS has deemed 43 of these PMIs as "significant" and has directed that they be reported to him on a monthly basis. The Director of DFAS uses the term "significant" to identify those measures that he feels either monitor problem areas requiring management attention, are management control items that he is particularly interested in, or provide workload figures that he is frequently asked to provide to other officials. Table 3.1 contains a listing of the current DFAS performance measures and indicators [Ref. 6]. Significant PMIs are annotated with an asterisk in column 4.

The performance measures and indicators developed and monitored by DFAS are exclusively input, workload, and output measures. These forms of performance measures and indicators are easier to develop than outcome measures and are considered the simplest forms of performance measures and indicators. DFAS does not currently track any outcome measures to assess the extent to which the activities of DFAS have the intended effect. Establishment of outcome measures is thwarted by a lack of clearly defined organizational goals. Efforts to obtain a written statement of the goals of DFAS for inclusion in this thesis were unsuccessful. Accordingly, it is difficult to develop outcome measures to monitor movement towards, or the accomplishment of DFAS goals.

It is important to reiterate that the focus of the current DFAS performance measurement program is internal management control. Accordingly, the performance

measures and indicators that DFAS has developed and monitors are focused on meeting internal needs, vice customer needs. This is an obvious weakness from the perspective of DFAS customers.

B. THE PROCESS USED TO DEVELOP THE PERFORMANCE MEASURES AND INDICATORS RECOMMENDED FOR MARINE CORPS USE

The Comptrollers for every Marine Corps base and station within the continental United States were surveyed and asked to identify, from their command's perspective, the specific items that they believed important to measure in order to evaluate the quality of service that DFAS is (or will be) providing to their command in the functional areas of finance and accounting. Comments were sought for five specific functional areas: military pay, civilian pay, travel payments, contractor and vendor pay, and general accounting.

The responses from the comptrollers were synthesized and follow-up interviews were conducted with select comptrollers to clarify and expand upon the information provided. Based upon the input from Marine Corps comptrollers and the principles of performance measurement, a list of performance measures and indicators, *that the Marine Corps can use to effectively and efficiently assess the quality of service that DFAS is providing in the functional areas of finance and accounting*, was developed for each of the five functional areas that fit within the scope of this thesis. Tables 4.1 through 4.5 contain the resulting lists of performance measures and indicators for each functional area. The performance measures and indicators listed are those that have been identified as most useful to Marine Corps commanders and financial managers. Some of the PMIs listed as most useful to Marine Corps commanders and financial managers are the same as, or similar to, PMIs currently monitored by DFAS for internal management purposes. Those

MILITARY PAY - ACTIVE

FUNCTIONAL AREA	PERFORMANCE MEASURES AND INDICATORS	CURRENT DFAS PMI NUMBER
Military Pay-Active	Active Component Military Pay Accounts Maintained (#)	107
Military Pay-Active	Overpaid/In Debt Accounts at Separation (%)	109
Military Pay-Active	Pay Instruments Delivered (%)	110
Military Pay-Active	Pay-Effecting Transactions Processed on Time (#)	111
Military Pay-Active	Timeliness of Pay-Effecting Transactions (%)	112
Military Pay-Active	Timeliness of Responses to Written Inquiries (Avg. # Days)	113
Military Pay-Active	Average Turnaround Time on Special Payment Requests (Avg. # Days)	
Military Pay-Active	Number of Special Payment Requests Received (#)	
Military Pay-Active	Number of Special Payment Requests Received (%)	
Military Pay-Active	Timeliness of Special Payment Postings to JUMPS (%)	
Military Pay-Active	JUMPS Accessibility (%)	
Military Pay-Active	Help Line Accessibility (%)	
Military Pay-Active	Timeliness of LES Delivery (%)	
Military Pay-Active	Number of Payroll Changes Processed (#)	
Military Pay-Active	Unit Cost Per Active Component Military Pay Account Maintained (\$)	
Military Pay-Active	Customer Satisfaction Rating (%)	

Table 4.1 Performance Measures and Indicators for the Military Pay-Active Component function

CIVILIAN PAY

FUNCTIONAL AREA	PERFORMANCE MEASURES AND INDICATORS	CURRENT DFAS PMI NUMBER
Civilian Pay	Active Accounts Maintained (DCPS, DBMS, Other) (#)	8
Civilian Pay	Permanent Payroll Changes Processed (#)	10
Civilian Pay	Special Payments Made (#)	
Civilian Pay	Special Payments Made (%)	11
Civilian Pay	Timeliness of Pay-Effecting Transactions (%)	12
Civilian Pay	Timeliness of Retirement Records to OPM (DCPS and DBMS only) (%)	13
Civilian Pay	Timeliness of Responses to Written Inquiries (Avg. # Days)	
Civilian Pay	Help Line Accessibility (%)	
Civilian Pay	Timeliness of Responses to Requests for Ad Hoc Reports (Avg. # Days)	
Civilian Pay	Unit Cost Per Active Account Maintained (\$)	
Civilian Pay	Customer Satisfaction Rating (%)	

Table 4.2 Performance Measures and Indicators for the Civilian Pay function

TRAVEL

FUNCTIONAL AREA	PERFORMANCE MEASURES AND INDICATORS	CURRENT DFAS PMI NUMBER
Travel	Travel Advances (#)	133
Travel	Travel Voucher Timeliness (TDY) (%)	134
Travel	Travel Vouchers on Hand (#)	135
Travel	Travel Vouchers Processed (#)	136
Travel	Travel Voucher Timeliness (PCS) (%)	
Travel	Average Turnaround Time for Travel Advances (TDY) (Avg. # Days)	
Travel	Average Turnaround Time for Travel Advances (PCS) (Avg. # Days)	
Travel	Average Turnaround Time for Travel Settlements (TDY) (Avg. # Days)	
Travel	Average Turnaround Time for Travel Settlements (PCS) (Avg. # Days)	
Travel	Travel Vouchers Processed (TDY) (#)	
Travel	Travel Vouchers Processed (PCS) (#)	
Travel	Timeliness of Responses to Written Inquiries (Avg. # Days)	
Travel	Help Line Accessibility (%)	
Travel	Number of Supplemental Travel Claims Processed (#)	
Travel	Accuracy of Travel Settlements (TDY) (%)	
Travel	Accuracy of Travel Settlements (PCS) (%)	
Travel	Unit Cost Per Travel Advance (TDY) (\$)	
Travel	Unit Cost Per Travel Advance (PCS) (\$)	
Travel	Unit Cost Per Travel Settlement (TDY) (\$)	
Travel	Unit Cost Per Travel Settlement (PCS) (\$)	
Travel	Number of Customer Complaints Received (#)	
Travel	Customer Satisfaction Rating (%)	

Table 4.3 Performance Measures and Indicators for the Travel function

CONTRACTOR AND VENDOR PAY

FUNCTIONAL AREA	PERFORMANCE MEASURES AND INDICATORS	CURRENT DFAS PMI NUMBER
Contract/Vendor Pay	Contract Modifications Processed (Local Procurement) (#)	18
Contract/Vendor Pay	Contract Modifications Processed (MOCAS) (#)	19
Contract/Vendor Pay	Contract Reconciliations and Closeouts (MOCAS) (#)	20
Contract/Vendor Pay	Contracts Closed (Local Procurement) (#)	21
Contract/Vendor Pay	Cost Vouchers Processed (#)	22
Contract/Vendor Pay	Discounts Lost Subject to the Prompt Payment Act (#)	23
Contract/Vendor Pay	Discounts Lost Subject to the Prompt Payment Act (\$)	24
Contract/Vendor Pay	Discounts Taken Subject to the Prompt Payment Act (#)	25
Contract/Vendor Pay	Discounts Taken Subject to the Prompt Payment Act (\$)	26
Contract/Vendor Pay	Discounts Taken Subject to the Prompt Payment Act (%)	27
Contract/Vendor Pay	Disbursements Made (#)	29
Contract/Vendor Pay	Disbursements Made (\$)	30
Contract/Vendor Pay	Disbursements Made Subject to the Prompt Payment Act (\$)	31
Contract/Vendor Pay	Electronic Data Interchange (EDI) Invoices Received (#)	32
Contract/Vendor Pay	Electronic Data Interchange (EDI) Invoices Received (\$)	33
Contract/Vendor Pay	Electronic Data Interchange (EDI) Invoices Received (%)	34
Contract/Vendor Pay	Electronic Funds Transfer (EFT) Payments (#)	35
Contract/Vendor Pay	Electronic Funds Transfer (EFT) Payments (\$)	36
Contract/Vendor Pay	Electronic Funds Transfer (EFT) Payments (%)	37
Contract/Vendor Pay	Interest Penalties Paid Subject to the Prompt Payment Act (#)	38
Contract/Vendor Pay	Interest Penalties Paid Subject to the Prompt Payment Act (\$)	39
Contract/Vendor Pay	Interest Penalties Paid Subject to the Prompt Payment Act (%)	40
Contract/Vendor Pay	Invoices / Transportation Vouchers Processed for Payments (#)	41
Contract/Vendor Pay	Late Payments Subject to the Prompt Payment Act (#)	42
Contract/Vendor Pay	Late Payments Subject to the Prompt Payment Act (\$)	43
Contract/Vendor Pay	Late Payments Subject to the Prompt Payment Act (%)	44
Contract/Vendor Pay	Overage Invoices On Hand (#)	45
Contract/Vendor Pay	Overage Invoices On Hand (\$)	46
Contract/Vendor Pay	Overpayments - MOCAS (#)	47
Contract/Vendor Pay	Overpayments - MOCAS (\$)	48

Table 4.4 Performance Measures and Indicators for the Contractor and Vendor Pay function

CONTRACTOR AND VENDOR PAY

FUNCTIONAL AREA	PERFORMANCE MEASURES AND INDICATORS	CURRENT DFAS PMI NUMBER
Contract/Vendor Pay	Prevalidation of Payment Transactions (#)	49
Contract/Vendor Pay	Prevalidation of Payment Transactions (\$)	50
Contract/Vendor Pay	Prevalidation of Payment Transactions (%)	
Contract/Vendor Pay	Number of Documents Failing Prevalidation Due to Systems Error (#)	
Contract/Vendor Pay	Progress Payments Processed (#)	51
Contract/Vendor Pay	Timeliness of Contract/Vendor Invoice Payments (%)	52
Contract/Vendor Pay	Timeliness of Cost Voucher Payments (%)	53
Contract/Vendor Pay	Timeliness of Progress Payments (%)	54
Contract/Vendor Pay	Discounts Lost Due to DFAS Error (#)	
Contract/Vendor Pay	Discounts Lost Due to DFAS Error (\$)	
Contract/Vendor Pay	Discounts Lost Due to DFAS Error (%)	
Contract/Vendor Pay	Interest Penalties Paid Due to DFAS Error (#)	
Contract/Vendor Pay	Interest Penalties Paid Due to DFAS Error (\$)	
Contract/Vendor Pay	Interest Penalties Paid Due to DFAS Error (%)	
Contract/Vendor Pay	Timeliness of Responses to Written Inquiries (Avg. # Days)	
Contract/Vendor Pay	Number of Customer Complaints Received (#)	
Contract/Vendor Pay	Help Line Accessibility (%)	
Contract/Vendor Pay	Unit Cost Per Voucher Paid (\$)	
Contract/Vendor Pay	Customer Satisfaction Rating (%)	

Table 4.4 (Continued)

GENERAL ACCOUNTING

FUNCTIONAL AREA	PERFORMANCE MEASURES AND INDICATORS	CURRENT DFAS PMI NUMBER
General Accounting	Aged Unmatched Disbursements (#)	85
General Accounting	Aged Unmatched Disbursements (\$)	86
General Accounting	Contract Obligation Authority (\$)	88
General Accounting	Timeliness of Departmental Accounting Reports - Internal (%)	89
General Accounting	Timeliness of Departmental Accounting Reports - Internal (Avg # Days Late)	90
General Accounting	Timeliness of Departmental Accounting Reports - External (%)	91
General Accounting	Timeliness of Departmental Accounting Reports - External (Avg # Days Late)	92
General Accounting	Unliquidated Obligations in Closing Accounts (ULOs) (#)	93
General Accounting	Unliquidated Obligations in Closing Accounts (ULOs) (\$)	94
General Accounting	Aged IDB Accounts Payable (Buyers) (#)	
General Accounting	Aged IDB Accounts Payable (Sellers) (#)	
General Accounting	Timeliness of Responses to Written Inquiries / Correction Notices (Avg. # Days)	
General Accounting	Turnaround Time on Requested Jobs (Avg. # Days)	
General Accounting	Accuracy of Accounting Reports (#)	
General Accounting	Accuracy of Accounting Reports (%)	
General Accounting	SABRS Accessibility (%)	
General Accounting	Unit Cost Per Dollar Accounted For (\$)	
General Accounting	Number of Customer Complaints Received (#)	
General Accounting	Customer Satisfaction Rating (%)	

Table 4.5 Performance Measures and Indicators for the General Accounting function

performance measures and indicators are identified by their current DFAS PMI number in column 3 of the tables.

C. SURVEY RESULTS

The Comptrollers for each of the fourteen Marine Corps bases and stations within the continental United States were surveyed as indicated above. Of those surveyed, only one command failed to respond. Of the commands that did respond, however, 31% failed to provide specific items that they believed to be important to measure to evaluate the quality of service that DFAS provided to their command. This is attributed to a general lack of understanding, on the part of these Marine Corps comptrollers, of the concept and principles of performance measurement. This point is significant in that without an understanding of the concept and principles of performance measurement, Marine Comptrollers will experience difficulty in implementing the requirements of the Government Performance and Results Act. It must be restated that in accordance with Public Law 103-62, the Government Performance and Results Act, in 1997 as part of their budget submission for fiscal year 1999, each agency will be required to develop a detailed performance plan specifying "objective, quantifiable, and measurable standards and goals to be achieved" [Ref. 4].

In general, the performance measures and indicators that the comptrollers described as most useful were either workload or output measures of timeliness, accuracy, and service accessibility, unit cost measures, or a rating of customer satisfaction (a proxy outcome measure). The percentage of respondents (of those who recommended performance measures) who recommended a measure similar to the one included in Tables 4.1 through 4.5, is annotated in parentheses following the definition of the performance measure/indicator provided in the following subsections. The actual percentages provide some insight into the significance of the

performance measure or indicator to Marine Corps commanders and financial managers. It is important to reiterate that, in general, the level of knowledge that Marine Corps comptrollers possess regarding performance measurement appears to be limited. This reduced the ability of any one comptroller to recommend a complete set of performance measures and indicators for all functional areas.

D. MILITARY PAY PERFORMANCE MEASURES AND INDICATORS

DFAS maintains and processes the military payroll for all active duty and reserve Marines. This involves all aspects of the pay function to include pay computation, leave record keeping, and reporting of pay information to various entities within the federal, state, and local government.

Military pay was considered by most commanders and financial managers as a relatively stable system requiring limited oversight. Additionally, extensive control over the military pay system remains with Marine Corps commanders via their Unit Diary reporting capability. Accordingly, only a limited number of performance measures and indicators were determined to be necessary.

A definition for each recommended performance measure/indicator, a discussion of its purpose, and the percentage of respondents that recommended it is contained in the following subsections.

1. Active Component Military Pay Accounts Maintained (#)

A basic workload measure. Defined as the total number of all active component military pay accounts maintained by DFAS within the active military pay system, to include all active pay accounts, deserters, AWOL members, confined members, MIAs, service academies, Reservists being maintained on active pay systems, and current month separatees [Ref. 7]. This measure provides commanders with a measure of the size of this functional area. (USMC response 33%)

2. Overpaid/In Debt Accounts at Separation (%)

A management control item used to monitor a known problem area. Defined as the percentage of all active component pay accounts which were overpaid, due to either debt, or payment error, at the time the service member separated from the military service. An overpayment/in-debt condition is defined as an amount in excess of \$25.00 [Ref. 7]. Marines who are overpaid/in debt at separation reflect problems in the pay system, that given time may have been corrected and would have been transparent to the command had the Marine not been separated. Additionally, these debts are more difficult and costly to recover due to the lack of control over the member's pay after separation. (USMC response 22%)

3. Pay Instruments Delivered (%)

A quality of service measure. Defined as the percentage of active component pay instruments (EFT, composite checks, individual checks, bonds, special pays, net pay, and allotments) delivered by DFAS to the payee on the first attempt on the designated pay day. The composite checks are counted by payee (line item) (Ref. 7). Provides commanders with a measure of the effectiveness of the pay delivery system. The timely delivery of pay instruments is a critical component of pay service. (USMC response 33%)

4. Pay-Effecting Transactions Processed on Time (#)

A workload measure. Defined as the number of all military active component pay-effecting transactions which are processed within 30 calendar days of entitlement. The term "processed" means when the action is input into the pay system, not when posted to the account. Provides commanders with a measure of the relative size of this process. (USMC response 22%)

5. Timeliness of Pay-Effecting Transactions (%)

A quality of service measure. Defined as the percentage of all military active component pay-effecting transactions which are processed within 30 calendar days of entitlement. The term "processed" means when the action is input into the pay system, not when posted to the account. Provides commanders with a measure of the timeliness of pay service provided. It is important that pay entitlements be processed in a timely manner to prevent financial hardship on the individual Marine. (USMC response 33%)

6. Timeliness of Responses to Written Inquiries (Average # of Days)

A quality of service measure. Provides commanders with a measure of the responsiveness of DFAS to customer inquiries. "Written inquiries" include any formal request for information that can be documented (i.e., letters, e-mail, voice-mail). Defined as the average number of days required by DFAS to provide final responses to written inquiries. Written inquiries include specific requests for information about an account that can only be satisfied by responding to the requester. Written requests for a change to the account, such as a change of address, can be satisfied by making the change and do not require a separate response to the requester. Responses to White House, Congressional, and Special inquiries are not part of this indicator. (USMC response 67%)

7. Average Turnaround Time on Special Payment Requests (Average # of Days)

A quality of service measure. Provides commanders with a measure of the timeliness of service and responsiveness of DFAS to special payment requests. Defined as the average number of days required for DFAS to process a special payment request and deliver the special payment. The clock begins upon receipt of the request by DFAS and continues until the payment is available to the payee. Special payments are normally requested to prevent financial hardship to a Marine,

that would be caused by having to wait until the next regularly scheduled payday to receive payment of a pay entitlement. (USMC response 56%)

8. Number of Special Payment Requests Received (#)

A workload measure. Defined as the number of special payment requests forwarded to DFAS during a reporting period. Provides commanders with an indicator of the adequacy of regular pay service. If regular pay service is adequate, the need for special payments that compensate for errors is reduced. (USMC response 44%)

9. Number of Special Payment Requests Received (%)

A workload measure. Defined as the percentage of special payment requests forwarded to DFAS during a reporting period as compared to the total number of payroll payments made. (USMC response 33%)

10. Timeliness of Special Payment Postings to JUMPS (%)

A quality of service measure. Provides the commander with a measure of the timeliness of special payment processing. Timely posting of special payments to a member's JUMPS pay account reduces the possibility of duplicate payment of a single entitlement on the next regular pay day. Defined as the percentage of special payments that are posted to JUMPS within an acceptable time frame. (USMC response 22%)

11. JUMPS Accessibility (%)

A quality of service measure. Defined as the percentage of time, during normal working hours, that the Joint Uniform Military Pay System (JUMPS) is accessible to the commander or financial manager for inquiry and input. (USMC response 56%)

12. Help Line Accessibility (%)

A quality of service measure. Defined as the percentage of time, during normal working hours, that access to the DFAS established help lines is available. If

all incoming phone lines are busy, or the time it takes to connect to a help line representative exceeds 30 seconds, the help lines are considered not accessible. (USMC response 22%)

13. Timeliness of LES Delivery (%)

A quality of service measure. Defined as the percentage of reporting units, whose Leave and Earning Statements (LESs) are delivered prior to the regularly scheduled, mid-month pay day. LESs provide Marines with pay information for the preceding month and forecasted payment amounts for the current month. Therefore, it is critical that Marines have access to this information as soon as possible to provide them with the information they require to manage their own financial responsibilities. (USMC response 33%)

14. Number of Payroll Changes Processed (#)

A quality of service measure. Provides the commander with an indicator of the accuracy of the pay system. Defined as the number of changes to the roughroll required to produce an accurate smoothroll. If the pay system is completely current and accurate, no changes to a roughroll would be required. (USMC response 44%)

15. Unit Cost Per Active Component Military Pay Account Maintained (\$)

An input measure. Over time, this can provide the commander with an indicator of DFAS cost trends and may be used as a basis for negotiation of service levels and for comparison with industry standards. Defined as the cost charged to the service by DFAS for providing military pay service, divided by the number of active component military pay accounts maintained. (USMC response 22%)

16. Customer Satisfaction Rating (%)

An outcome measure. Provides the commander with a measure of how well DFAS is meeting the overall needs of its customers. Defined as the rating value calculated from the results of customer service surveys. These surveys should be

designed by DFAS in concert with the service concerned, and other DFAS customers, and measure all facets of customer service. (USMC response 33%)

E. CIVILIAN PAY PERFORMANCE MEASURES AND INDICATORS

DFAS pays most civilian employees of the Department of Defense. These services include biweekly employee payments, all cash awards, and other non-routine payments such as separation incentives, time and attendance processing, leave accounting, all payments and reporting for allotments, wage and tax reporting, notification and execution of debt collection actions, periodic reporting to employees, and responses to written and telephonic inquiries. Civilian Pay was viewed by most commanders as a relatively uncomplicated pay system requiring few performance measures.

A definition for each recommended performance measure/indicator, a discussion of its purpose, and the percentage of respondents that recommended it is contained in the following subsections.

1. Active Accounts Maintained (DCPS, DBMS, Other) (#)

A workload measure. Defined as the total number of civilian employee accounts in an active pay status serviced by DFAS, to include "active paid," "active unpaid," and "separated this pay period" [Ref. 7]. Provides commanders with a measure of the size of the functional area. (USMC response 22%)

2. Permanent Payroll Changes Processed (#)

A workload measure. Defined as the total number of permanent payroll changes processed for civilian employee accounts in an active pay status serviced by DFAS to include, "active paid," "active unpaid," and "separated this pay period." A permanent payroll change is defined as a change to an account which will be in effect for more than one pay period, i.e., address change, tax deduction change, salary

change, etc. [Ref. 7]. Provides commanders with a measure of relative size of this process. (USMC response 33%)

3. Special Payments Made (#)

A output measure. Defined as the number of special payroll payments made by DFAS outside the normal processing operation. Provides commanders with an indicator of the accuracy of the civilian pay system. If the pay system were completely accurate there would be no need for special payments. (USMC response 67%)

4. Special Payments Made (%)

A quality of service measure. Defined as the percentage of special payroll payments made by DFAS outside the normal processing operation as compared to the total number of payroll payments made [Ref. 7]. Provides commanders with an indicator of the accuracy of the civilian pay system. (USMC response 22%)

5. Timeliness of Pay-Effecting Transactions (%)

A quality of service measure. Defined as the percentage of pay-effecting transactions which are processed by DFAS within one pay period after the date of receipt of notification of change. A pay-effecting adjustment is any monetary adjustment required to change current bi-weekly payments, i.e., gross pay [Ref. 7]. Provides commanders with a measure of the timeliness and accuracy of pay service. (USMC response 33%)

6. Timeliness of Retirement Records to OPM (%)

A quality of service measure. Defined as the percentage of retirement packages processed by DFAS, received at OPM within 60 days of the actual date of retirement of the employee [Ref. 7]. A measure designed to monitor a known problem area. Delays in the receipt of retirement packages by OPM delays the

payment of retirement benefits and could cause financial hardship. (USMC response 22%)

7. Timeliness of Responses to Written Inquiries (Average # of Days)

A quality of service measure. Provides commanders with a measure of the responsiveness of DFAS to customer inquiries. "Written inquiries" include any formal request for information that can be documented (i.e., letters, e-mail, voice-mail). Defined as the average number of days required by DFAS to provide final responses to written inquiries. Written inquiries include specific requests for information about an account that can only be satisfied by responding to the requester. Written requests for a change to the account, such as a change of address, can be satisfied by making the change and do not require a separate response to the requester. Responses to White House, Congressional, and Special inquiries are not part of this indicator. (USMC response 67%)

8. Help Line Accessibility (%)

A quality of service measure. Defined as the percentage of time, during normal working hours, that access to DFAS established help lines is available. If all incoming phone lines are busy, or the time it takes to connect to a help line representative exceeds 30 seconds, the help lines are considered not accessible. (USMC response 22%)

9. Timeliness of Responses to Requests for Ad Hoc Reports (Average # of Days)

A quality of service measure. Defined as the average number of days required for DFAS to provide an ad hoc report. Clock begins at the time the request is submitted and ends upon delivery of the requested report. Ad hoc reports provide commanders with information they request to assist them in managing civilian personnel. (USMC response 22%)

10. Unit Cost Per Active Account Maintained (\$)

An input measure. Over time, this can provide the commander with an indicator of DFAS cost trends and may be used as a basis for negotiation of service levels and for comparison with industry standards. Defined as the cost charged to the service by DFAS for providing civilian pay service, divided by the number of active civilian pay accounts maintained. (USMC response 22%)

11. Customer Satisfaction Rating (%)

An outcome measure. Provides the commander with a measure of how well DFAS is meeting the overall needs of its customers. Defined as the rating value calculated from the results of customer service surveys. These surveys should be designed by DFAS in concert with the service concerned and other DFAS customers and measure all facets of customer service. (USMC response 22%)

F. TRAVEL PERFORMANCE MEASURES AND INDICATORS

DFAS provides travel pay services for DoD military and civilians. These services include travel order and voucher processing and payment, tracking and payment of all travel related functions, and responding to written and telephonic inquiries. Travel has historically proven to be a high visibility area of concern for most commanders and financial managers. Members are not expected to incur any out-of-pocket expenses for official travel and therefore, timely advances and settlements are expected. Commanders are often concerned with the level of travel service they receive as it directly impacts upon the morale of the unit. Accordingly, this area requires thorough measurement and reporting.

A definition for each recommended performance measure/indicator, a discussion of its purpose, and the percentage of respondents that recommended it is contained in the following subsections.

1. Travel Advances (#)

A workload measure. Provides the commander with an indication of the relative size of the functional area. Defined as the total number of travel advances issued by DFAS to Marine Corps travelers. (USMC response 33%)

2. Travel Voucher Timeliness (TDY) (%)

A quality of service measure. Defined as the percentage of TDY travel settlement vouchers processed outside the DFAS goal of 5 working days. Processing time begins on the date a request for payment is received at the processing site and ends the date a check is mailed, an EFT transaction is released, or a cash payment is prepared [Ref. 7]. (USMC response 33%)

3. Travel Vouchers on Hand (#)

An workload measure. Provides the commander with an indication of the backlog of travel vouchers and thus an indication of the adequacy of the travel system. Defined as the number of unsettled TDY and PCS travel vouchers DFAS has on-hand at the end of a reporting period. (USMC response 33%)

4. Travel Vouchers Processed (#)

A workload measure. Defined as the total number of TDY and PCS settlement vouchers processed by DFAS, which also includes vouchers for separation and retirement moves [Ref. 7]. Provides commanders with a measure of the size of the functional area. (USMC response 44%)

5. Travel Voucher Timeliness (PCS) (%)

A quality of service measure. Defined as the percentage of PCS travel settlement vouchers processed outside the DFAS goal of 10 working days. Processing time begins on the date a request for payment is received at the processing site and ends the date a check is mailed, an EFT transaction is released, or a cash payment is prepared. (USMC response 33%)

6. Average Turnaround Time for Travel Advances (TDY) (Average # of Days)

A quality of service measure. Defined as the average number of days required by DFAS to process a TDY travel advance. Processing time begins on the date a request for payment is received at the processing site and ends the date a check is mailed, an EFT transaction is released, or a cash payment is prepared. (USMC response 67%)

7. Average Turnaround Time for Travel Advances (PCS) (Average # of Days)

A quality of service measure. Defined as the average number of days required by DFAS to process a PCS travel advance. Processing time begins on the date a request for payment is received at the processing site and ends the date a check is mailed, an EFT transaction is released, or a cash payment is prepared. (USMC response 67%)

8. Average Turnaround Time for Travel Settlements (TDY) (Average # of Days)

A quality of service measure. Defined as the average number of days required by DFAS to process a TDY travel settlement. Processing time begins on the date a request for payment is received at the processing site and ends the date a check is mailed, an EFT transaction is released, or a cash payment is prepared. (USMC response 78%)

9. Average Turnaround Time for Travel Settlements (PCS) (Average # of Days)

A quality of service measure. Defined as the average number of days required by DFAS to process a PCS travel settlement. Processing time begins on the date a request for payment is received at the processing site and ends the date a check is mailed, an EFT transaction is released, or a cash payment is prepared. (USMC response 78%)

10. Travel Vouchers Processed (TDY) (#)

A workload measure. Defined as the total number of TDY travel settlement vouchers processed by DFAS. Provides commanders with a measure of the relative size of this functional area. (USMC response 33%)

11. Travel Vouchers Processed (PCS) (#)

A workload measure. Defined as the total number of PCS travel settlement vouchers processed by DFAS. Provides commanders with a measure of the relative size of this functional area. (USMC response 33%)

12. Timeliness of Responses to Written Inquiries (Average # of Days)

A quality of service measure. Provides commanders with a measure of the responsiveness of DFAS to customer inquiries. "Written inquiries" include any formal request for information that can be documented (i.e., letters, e-mail, voice-mail). Defined as the average number of days required by DFAS to provide final responses to written inquiries. Written inquiries include specific requests for information about a claim that can only be satisfied by responding to the requester. Written requests that require completion of a supplemental travel claim and do not require a separate response to the requester are not included in this measure. (USMC response 67%)

13. Help Line Accessibility (%)

A quality of service measure. Defined as the percentage of time, during normal working hours, that access to DFAS established help lines is available. If all incoming phone lines are busy, or the time it takes to connect to a help line representative exceeds 30 seconds, the help lines are considered not accessible. (USMC response 22%)

14. Number of Supplemental Travel Claims Processed (#)

A workload measure. Defined as the total number of Supplemental travel claims processed by DFAS. Provides commanders with an indication of the accuracy of initial travel settlements. Supplemental claims are usually the result of the receipt of additional information regarding a claim, or the correction of an oversight on the initial claim. (USMC response 56%)

15. Accuracy of Travel Settlements (TDY) (%)

A quality of service measure. Defined as the percentage of TDY travel settlements that did not contain an error. Based on the results of an audit of a random sample of settled claims. (USMC response 22%)

16. Accuracy of Travel Settlements (PCS) (%)

A quality of service measure. Defined as the percentage of PCS travel settlements that did not contain an error. Based on the results of an audit of a random sample of settled claims. (USMC response 22%)

17. Unit Cost Per Travel Advance (TDY) (\$)

An input measure. Over time, this can provide the commander with an indicator of DFAS cost trends and may be used as a basis for negotiation of service levels and for comparison with industry standards. Defined as the cost charged to the service by DFAS for providing TDY travel advances, divided by the number of TDY travel advances processed. (USMC response 22%)

18. Unit Cost Per Travel Advance (PCS) (\$)

An input measure. Over time, this can provide the commander with an indicator of DFAS cost trends and may be used as a basis for negotiation of service levels and for comparison with industry standards. Defined as the cost charged to the service by DFAS for providing PCS travel advances, divided by the number of PCS travel advances processed. (USMC response 22%)

19. Unit Cost Per Travel Settlement (TDY) (\$)

An input measure. Over time, this can provide the commander with an indicator of DFAS cost trends and may be used as a basis for negotiation of service levels and for comparison with industry standards. Defined as the cost charged to the service by DFAS for providing TDY travel settlements, divided by the number of TDY travel settlements processed. (USMC response 22%)

20. Unit Cost Per Travel Settlement (PCS) (\$)

An input measure. Over time, this can provide the commander with an indicator of DFAS cost trends and may be used as a basis for negotiation of service levels and comparison with industry standards. Defined as the cost charged to the service by DFAS for providing PCS travel settlements, divided by the number of PCS travel settlements processed. (USMC response 22%)

21. Number of Customer Complaints Received (#)

A quality of service measure. Defined as the number of customer complaints regarding travel service received by DFAS during the reporting period. (USMC response 22%)

22. Customer Satisfaction Rating (%)

An outcome measure. Provides the commander with a measure of how well DFAS is meeting the overall needs of its customers. Defined as the rating value calculated from the results of customer service surveys. These surveys should be designed by DFAS in concert with the service concerned and other DFAS customers and measure all facets of customer service. (USMC response 22%)

G. CONTRACTOR AND VENDOR PAY PERFORMANCE MEASURES AND INDICATORS

DFAS provides invoice processing and disbursement services to vendors and contractors. This service includes invoice processing and payment, contract

processing and payment, transportation payments, and response to written and telephonic inquiries. Contractor and vendor pay is watched very closely by commanders and financial managers due to its potential for waste. In this era of fiscal belt-tightening, it is more important than ever for the services to eliminate wasteful business practices. The Prompt Payment Act, which governs many contractor and vendor payments, provides for the payment of interest penalties on late payments and allows for the taking of discounts offered under certain conditions. Both of these provisions can directly impact the service's bottom-line. Since DFAS charges the services based on its expenses, it can incur interest penalties or fail to take discounts and pass these real or opportunity losses on to the services. Therefore, it is especially important to design performance measures that monitor these two areas closely.

A definition for each recommended performance measure/indicator, a discussion of its purpose, and the percentage of respondents that recommended it is contained in the following subsections.

1. Contract Modifications Processed (Local Procurement) (#)

A workload measure. Defined as the total number of local procurement contract modifications processed by DFAS [Ref. 7]. (USMC response 22%)

2. Contract Modifications Processed (MOCAS) (#)

A workload measure. Defined as the total number of MOCAS contract modifications processed by DFAS [Ref. 7]. (USMC response 22%)

3. Contract Reconciliations and Closeouts (MOCAS) (#)

A workload measure. Defined as the total number of MOCAS contract reconciliations and closeouts received, processed, and on-hand at DFAS at the beginning and end of the month [Ref. 7]. (USMC response 22%)

4. Contracts Closed (Local Procurement) (#)

A workload measure. Defined as the total number of local procurement contracts closed by DFAS [Ref. 7]. (USMC response 22%)

5. Cost Vouchers Processed (#)

A workload measure. Defined as the total number of cost vouchers processed by the DFAS payment activity [Ref. 7]. Cost Vouchers are paid on cost-reimbursement contracts which provide for interim payment of allowable incurred cost to the extent prescribed in the contract. (USMC response 22%)

6. Discounts Lost Subject to the Prompt Payment Act (#)

A quality of service measure. Defined as the total number of discounts lost subject to the Prompt Payment Act. Provides the commander with the number of discounts lost. (USMC response 33%)

7. Discounts Lost Subject to the Prompt Payment Act (\$)

A quality of service measure. Provides the commander with the dollar value of discounts lost. Represents an opportunity cost. Defined as the total dollar value of discounts lost subject to the Prompt Payment Act. (USMC response 67%)

8. Discounts Taken Subject to the Prompt Payment Act (#)

A quality of service measure. Provides the commander with the number of discounts taken. Represents an cost savings. Defined as the total number of discounts taken subject to the Prompt Payment Act. (USMC response 22%)

9. Discounts Taken Subject to the Prompt Payment Act (\$)

A quality of service measure. Provides the commander with the dollar value of discounts taken. Represents an cost savings. Defined as the total dollar value of discounts taken subject to the Prompt Payment Act. (USMC response 33%)

10. Discounts Taken Subject to the Prompt Payment Act (%)

A quality of service measure. Defined as the percentage of the number of discounts offered that were taken subject to the Prompt Payment Act. (USMC response 44%)

11. Disbursements Made (#)

A workload measure. Defined as the total number of disbursements made. Provides commanders with a measure of the size of the functional area. (USMC response 67%)

12. Disbursements Made (\$)

A workload measure. Defined as the total dollar value of disbursements made. Provides commanders with a measure of the size of the functional area. (USMC response 44%)

13. Disbursements Made Subject to the Prompt Payment Act (\$)

A workload measure. Defined as the total dollar value of disbursements made that were subject to the Prompt Payment Act. (USMC response 22%)

14. Electronic Data Interchange (EDI) Invoices Received (#)

A workload measure. Defined as the total number of contract/vendor pay invoices or transportation vouchers received by DFAS from vendors/carriers via electronic data interchange (EDI) [Ref. 7]. (USMC response 22%)

15. Electronic Data Interchange (EDI) Invoices Received (\$)

A workload measure. Defined as the total dollar value of all contract/vendor pay invoices or transportation vouchers received by DFAS from vendors/carriers via electronic data interchange (EDI) [Ref. 7]. (USMC response 22%)

16. Electronic Data Interchange (EDI) Invoices Received (%)

A workload measure. Defined as the percentage of all contract/vendor invoices or transportation vouchers received by DFAS via electronic data interchange

(EDI) [Ref. 7]. Designed to determine the progress towards EDI processes. (USMC response 22%)

17. Electronic Funds Transfer (EFT) Payments (#)

A workload measure. Defined as the total number of contract/vendor payments made by DFAS via EFT [Ref. 7]. (USMC response 22%)

18. Electronic Funds Transfer (EFT) Payments (\$)

A workload measure. Defined as the total dollar value of contract/vendor payments made by DFAS via EFT [Ref. 7]. (USMC response 22%)

19. Electronic Funds Transfer (EFT) Payments (%)

A workload measure. Defined as the percentage of contract/vendor payments made by DFAS via EFT [Ref. 7]. Designed to measure the degree to which the contractor/vendor base is receiving payments via EFT. (USMC response 22%)

20. Interest Penalties Paid Subject to the Prompt Payment Act (#)

A quality of service measure. Defined as the total number of interest penalties paid subject to the Prompt Payment Act. Provides the command with an indication of the efficiency of the payment system. (USMC response 44%)

21. Interest Penalties Paid Subject to the Prompt Payment Act (\$)

A quality of service measure. Defined as the total dollar value of interest penalties paid subject to the Prompt Payment Act. Provides the command with an indication of the efficiency of the payment system. (USMC response 89%)

22. Interest Penalties Paid Subject to the Prompt Payment Act (%)

A quality of service measure. Defined as the percentage of vouchers paid, subject to the Prompt Payment Act, that incurred interest penalties. Provides the command with an indication of the efficiency of the payment system. (USMC response 22%)

23. Invoices/Transportation Vouchers Processed for Payment (#)

A workload measure. Defined as the total number of contract/vendor pay invoices and/or transportation vouchers processed by DFAS for payment. (USMC response 22%)

24. Late Payments Subject to the Prompt Payment Act (#)

A quality of service measure. Defined as the number of payments processed by DFAS, subject to the Prompt Payment Act that were considered late, regardless of the payment of an interest penalty. (USMC response 78%)

25. Late Payments Subject to the Prompt Payment Act (\$)

A quality of service measure. Defined as the dollar value of payments processed by DFAS, subject to the Prompt Payment Act that were considered late, regardless of the payment of an interest penalty. (USMC response 22%)

26. Late Payments Subject to the Prompt Payment Act (%)

A quality of service measure. Defined as the percentage of payments processed by DFAS, subject to the Prompt Payment Act that were considered late, regardless of the payment of an interest penalty. (USMC response 22%)

27. Overage Invoices On Hand (#)

A workload measure. Defined as the number of overage invoices on hand at DFAS at the end of the reporting period. (USMC response 22%)

28. Overage Invoices On Hand (\$)

A workload measure. Defined as the dollar value of all overage invoices on hand at DFAS at the end of the reporting period. (USMC response 22%)

29. Overpayments - MOCAS (#)

A quality of service measure. Defined as the number of overpayments paid to contractors through MOCAS. Overpayments are defined as duplicate, erroneous, or invalid payments made to a contractor which exceed the authorized amount billed on

an invoice or the total authorized amount of the contract [Ref. 7]. (USMC response 22%)

30. Overpayments - MOCAS (\$)

A quality of service measure. Defined as the dollar value of overpayments paid to contractors through MOCAS. Overpayments are defined as duplicate, erroneous, or invalid payments made to a contractor which exceed the authorized amount billed on an invoice or the total authorized amount of the contract [Ref. 7]. (USMC response 22%)

31. Prevalidation of Payment Transactions (#)

A workload measure. Defined as the number of payment transactions processed by DFAS that were prevalidated prior to payment. (USMC response 22%)

32. Prevalidation of Payment Transactions (\$)

A workload measure. Defined as the dollar value of payment transactions processed by DFAS that were prevalidated prior to payment. (USMC response 22%)

33. Prevalidation of Payment Transactions (%)

A workload measure. Defined as the percentage of payment transactions processed by DFAS that were prevalidated prior to payment. (USMC response 22%)

34. Number of Documents Failing Prevalidation Due to Systems Error (#)

A quality of service measure. Defined as the number of documents that erroneously fail prevalidation due to a systems or programming error. (USMC response 44%)

35. Progress Payments Processed (#)

A workload measure. Defined as the total number of progress payments processed by the DFAS payment activity. Progress payments are paid to a contractor based on the percentage or stage of contract completion [Ref. 7]. (USMC response 22%)

36. Timeliness of Contract/Vendor Invoice Payments (%)

A quality of service measure. Defined as the percentage of contract/vendor pay invoices/transportation vouchers paid by DFAS within 23-30 days of the PPA or contract requirement [Ref. 7]. (USMC response 22%)

37. Timeliness of Cost Voucher Payments (%)

A quality of service measure. Defined as the percentage of cost voucher payments made by DFAS within 12-14 days of the contract requirement [Ref. 7]. (USMC response 22%)

38. Timeliness of Progress Payments (%)

A quality of service measure. Defined as the percentage of progress payments made by DFAS within 5-7 days of the contract requirement [Ref. 7]. (USMC response 22%)

39. Discounts Lost Due to DFAS Error (#)

A quality of service measure. Designed to assign responsibility for lost discounts. Defined as the number of discounts lost as the result of DFAS error. Excludes discounts lost prior to DFAS receipt of the payment voucher. (USMC response 22%)

40. Discounts Lost Due to DFAS Error (\$)

A quality of service measure. Designed to assign responsibility for lost discounts. Defined as the dollar value of discounts lost as the result of DFAS error. Excludes discounts lost prior to DFAS receipt of the payment voucher. (USMC response 22%)

41. Discounts Lost Due to DFAS Error (%)

A quality of service measure. Designed to assign responsibility for lost discounts. Defined as the percentage of discounts lost, that were lost as the result of DFAS error. (USMC response 22%)

42. Interest Penalties Paid Due to DFAS Error (#)

A quality of service measure. Designed to assign responsibility for interest penalties. Defined as the number of interest penalties incurred as a result of DFAS error. Excludes interest penalties incurred prior to DFAS receipt of the payment voucher. (USMC response 22%)

43. Interest Penalties Paid Due to DFAS Error (\$)

A quality of service measure. Designed to assign responsibility for interest penalties. Defined as the dollar value of interest penalties incurred as a result of DFAS error. Excludes interest penalties incurred prior to DFAS receipt of the payment voucher. (USMC response 22%)

44. Interest Penalties Paid Due to DFAS Error (%)

A quality of service measure. Designed to assign responsibility for interest penalties. Defined as the percentage of interest penalties incurred, that were incurred as a result of DFAS error. (USMC response 22%)

45. Timeliness of Responses to Written Inquiries (Average # of Days)

A quality of service measure. Provides commanders with a measure of the responsiveness of DFAS to customer inquiries. "Written inquiries" include any formal request for information that can be documented (i.e., letters, e-mail, voice-mail). Defined as the average number of days required by DFAS to provide final responses to written inquiries. Written inquiries include specific requests for information about a contract or voucher that can only be satisfied by responding to the requester. (USMC response 67%)

46. Number of Customer Complaints Received (#)

A quality of service measure. Defined as the number of customer complaints regarding contract and vendor pay service received by DFAS during the reporting period. (USMC response 33%)

47. Help Line Accessibility

A quality of service measure. Defined as the percentage of time, during normal working hours, that access to DFAS established help lines is available. If all incoming phone lines are busy, or the time it takes to connect to a help line representative exceeds 30 seconds, the help lines are considered not accessible. (USMC response 22%)

48. Unit Cost Per Voucher Paid (\$)

An input measure. Defined as the cost charged to the service by DFAS for providing contractor/vendor pay service, divided by the number of payment vouchers processed. Over time, this can provide the commander with an indicator of DFAS cost trends and may be used as a basis for negotiation of service levels and for comparison with industry standards. (USMC response 33%)

49. Customer Satisfaction Rating (%)

An outcome measure. Defined as the rating value calculated from the results of customer service surveys. These surveys should be designed by DFAS in concert with the service concerned and other DFAS customers and measure all facets of customer service. Provides the commander with a measure of how well DFAS is meeting the overall needs of its customers. (USMC response 44%)

H. GENERAL ACCOUNTING PERFORMANCE MEASURES AND INDICATORS

DFAS provides accounting and financial reports and other management information products to DoD financial managers reflecting the status of government funds allocated to them for execution. DoD financial managers rely on these reports to make decisions and take actions in conducting the programs, operations, and affairs of the component and to exercise proper stewardship over their resources. Accordingly, DFAS is responsible for maintaining the accounting system, making

system improvements, and protecting the integrity of accounting data. Based on the importance of this responsibility and the effect that DFAS performance can have on the component's ability to exercise proper stewardship over its resources, careful and thorough measurement of DFAS performance is required.

A definition for each recommended performance measure/indicator, a discussion of its purpose, and the percentage of respondents that recommended it is contained in the following subsections.

1. Aged Unmatched Disbursements (#)

A quality of service measure. Defined as the number of aged unmatched disbursements existing at the end of the reporting period. (USMC response 22%)

2. Aged Unmatched Disbursements (\$)

A quality of service measure. Defined as the dollar value of all aged unmatched disbursements existing at the end of the reporting period. (USMC response 22%)

3. Contract Obligation Authority (\$)

A workload measure. Defined as the total dollars obligated for contracts in all funding programs, to exclude civilian pay, military pay, and travel [Ref. 7]. (USMC response 22%)

4. Timeliness of Departmental Accounting Reports - Internal (%)

A quality of service measure. Defined as the percentage of the total number of departmental accounting reports that are submitted to the reporting centers by the due date required [Ref. 7]. (USMC response 56%)

5. Timeliness of Departmental Accounting Reports - Internal (Average # of Days Late)

A quality of service measure. Defined as the average number of days that departmental accounting reports are submitted to the reporting centers after the required reporting date [Ref. 7]. (USMC response 56%)

6. Timeliness of Departmental Accounting Reports -External (%)

A quality of service measure. Defined as the percentage of the total number of departmental accounting reports that are submitted to recipients outside of the reporting centers by the due date required [Ref. 7]. (USMC response 56%)

7. Timeliness of Departmental Accounting Reports -External (Average # of Days Late)

A quality of service measure. Defined as the average number of days that departmental accounting reports are submitted to recipients outside of the reporting centers after the required reporting date [Ref. 7]. (USMC response 56%)

8. Unliquidated Obligations in Closing Accounts (ULOs) (#)

A quality of service measure. Defined as the total number of valid contractual and other obligations for goods/services with a specified delivery requirement or period of performance, for which liquidating payments have not been recorded, in appropriations closing at the end of the current fiscal year [Ref. 7]. (USMC response 22%)

9. Unliquidated Obligations in Closing Accounts (ULOs) (\$)

A quality of service measure. Defined as the dollar value of valid contractual and other obligations for goods/services with a specified delivery requirement or period of performance, for which liquidating payments have not been recorded, in appropriations closing at the end of the current fiscal year [Ref. 7]. (USMC response 22%)

10. Aged IDB Accounts Payable (Buyers) (#)

A quality of service measure. Defined as the number of aged IDB accounts payable (buyers list) existing at the end of the reporting period. (USMC response 22%)

11. Aged IDB Accounts Payable (Seller) (#)

A quality of service measure. Defined as the number of aged IDB accounts payable (sellers list) existing at the end of the reporting period. (USMC response 22%)

12. Timeliness of Responses to Written Inquiries/Correction Notices (Average # of Days)

A quality of service measure. Provides commanders with a measure of the responsiveness of DFAS to customer inquiries. "Written inquiries" include any formal request for information that can be documented (i.e., letters, e-mail, voice-mail). Defined as the average number of days required by DFAS to provide final responses to written inquiries. Written inquiries include specific requests for information about an accounting report or correction notice that can only be satisfied by responding to the requester. (USMC response 78%)

13. Turnaround Time on Requested Jobs (Average # of Days)

A quality of service measure. Defined as the average number of days required for DFAS to respond to job requests. Clock begins on the date of the request and ends upon receipt of the requested job. (USMC response 33%)

14. Accuracy of Accounting Reports (#)

A quality of service measure. Defined as the number of accounting reports requiring significant correction. (USMC response 56%)

15. Accuracy of Accounting Reports (%)

A quality of service measure. Defined as the percentage of accounting reports issued that did not require significant correction. (USMC response 56%)

16. SABRS Accessibility (%)

A quality of service measure. Defined as the percentage of time, during normal working hours, that SABRS is accessible to the financial manager for inquiry and input. (USMC response 56%)

17. Unit Cost Per Dollar Accounted For (\$)

An input measure. Defined as the cost charged to the service by DFAS for providing accounting service, divided by the total dollar amount accounted for. Over time, this can provide the commander with an indicator of DFAS cost trends and may be used as a basis for negotiation of service levels and for comparison with industry standards. (USMC response 22%)

18. Number of Customer Complaints Received (#)

A quality of service measure. Defined as the number of customer complaints regarding accounting service received by DFAS during the reporting period. (USMC response 33%)

19. Customer Satisfaction Rating (%)

An outcome measure. Defined as the rating value calculated from the results of customer service surveys. These surveys should be designed by DFAS in concert with the service concerned and other DFAS customers and measure all facets of customer service. Provides the commander with a measure of how well DFAS is meeting the overall needs of its customers. (USMC response 22%)

I. SUMMARY

This chapter began with an analysis of the current DFAS performance measurement program. Next, the chapter addressed the process used during the thesis research to develop a set of performance measures that the Marine Corps can use to effectively and efficiently assess the quality of service DFAS is providing in the functional areas of finance and accounting. A significant part of that process was surveying the comptrollers of the fourteen Marine Corps bases and stations in CONUS to determine what specific performance criteria commanders and financial managers define as the critical components of customer service. The results of this survey were summarized and discussed. Following that discussion, each of the

performance measures and indicators recommended by this thesis were defined and discussed.

The following chapter contains the conclusions of this study and recommendations for the implementation of a performance measurement program to assess the quality of customer service that DFAS is providing to the Marine Corps in the functional areas of finance and accounting.

V. CONCLUSIONS

A. MARINE CORPS' NEED FOR A PERFORMANCE MEASUREMENT PROGRAM

The DFAS Implementation Plan for Consolidation of DoD Accounting and Finance Operations, issued in July 1992, included a requirement for DFAS, in partnership with the military departments, to implement a standard, continuous performance and quality measurement process. Without such a program, the Marine Corps cannot adequately assess the quality of service that DFAS is providing to it in the functional areas of finance and accounting. Additionally, without a performance measurement program, the Marine Corps has no verifiable basis upon which to negotiate customer service levels, costs, or other service attributes.

B. THE CURRENT FEASIBILITY OF THE DFAS PERFORMANCE MEASUREMENT PROGRAM

Based on the assessment of the current capabilities of the DFAS Performance Measurement Program performed in this thesis research, it appears that DFAS is not currently capable of providing the Marine Corps with reliable performance measurement data. This conclusion is based on the absence of an efficient data collection system for DFAS. DFAS continues to maintain several different pay systems to service the different military services. Accordingly, from a DFAS perspective, it is not cost effective to develop an automated data collection system with the capability to interface with the different pay systems that it currently maintains. To cope with this dilemma, DFAS currently collects performance data manually and has postponed the development of an automated data collection system until all of the planned migratory pay systems are in place. As mentioned earlier, manual collection of performance data dramatically increases the possibility of error and the potential for the manipulation of performance measures and indicators.

In addition to the interface problem, there is disagreement among the services and DFAS centers as to definitions for the different data elements. Any variation in data definitions would seem to invalidate the performance measures calculated using data provided by more than one source. The resulting comparison of "apples to oranges" could result in poor management decisions based on erroneous data.

C. PREFERRED METHOD OF DATA AGGREGATION

DFAS currently aggregates its performance data across all services in an effort to provide the Director of DFAS with measures of overall DFAS performance. The Marine Corps, however, is interested only in DFAS performance as it pertains to the service that DFAS provides to the Marine Corps. Accordingly, the Marine Corps would prefer that the performance measures and indicators provided be based solely on Marine Corps specific data. This requirement must be taken into account when DFAS develops its performance measurement system. Care must be exercised to separate and aggregate Marine Corps data when calculating performance measures and indicators to be reported to the Marine Corps.

Another problem to overcome is the aggregation of data for reporting to different levels of command. The needs of Headquarters Marine Corps, and the level of data aggregation that it is interested in, will be quite different from the needs of the commander of a Marine Corps Air Station. For example, Headquarters Marine Corps may be interested in the total dollar value of all interest penalties paid subject to the Prompt Pay Act for all Marine Corps commands, whereas the commander of a Marine Corps Air Station may only be interested in the total dollar value of interest penalties paid subject to the Prompt Pay Act for contracts applying to his or her command.

D. EDUCATION REQUIREMENTS

Based on the number of survey respondents that were unfamiliar with the concept of performance measurement, and the requirements of the Government

Performance and Results Act, an education effort of some type is viewed as essential if the Marine Corps is to successfully implement and comply with the GPRA. To reiterate, the GPRA requires that in 1997 as part of their budget submission for fiscal year 1999, each agency will be required to develop a detailed performance plan specifying "objective, quantifiable, and measurable standards and goals expected to be achieved" [Ref. 4]. In addition, the performance plan will require the establishment of performance indicators to be used in measuring or assessing the relevant outputs, service levels, and outcomes of each program activity. It appears that without an education program to provide Marine Corps comptrollers with an understanding of the concepts and principles of performance measurement, compliance with the GPRA will be difficult.

E. RECOMMENDED ACTIONS

1. Reach Consensus on DFAS Mission and Goals

Before useful, customer-oriented, performance measurement can begin, DFAS and the Marine Corps must reach consensus on the mission and goals of DFAS and at a minimum, some definition of "quality service." The goals of the organization must be clearly stated and agreed upon. Otherwise, it will be impossible to determine what actions are necessary to achieve goals, or when progress towards goals is occurring. Similarly, without agreement as to what constitutes quality service, it would be impossible for the Marine Corps to gauge the attainment of satisfactory DFAS performance. Therefore, it is recommended that DFAS and the Marine Corps establish a Memorandum of Understanding outlining the mission and goals of DFAS and defining quality service for the functional areas of finance and accounting.

2. Request Interim Performance Measurement Report

Given that it is not currently possible for DFAS to provide the Marine Corps with the performance data it desires, and that it is likely that the capability to provide

the required data will not exist for several years, it is recommended that the Marine Corps request that DFAS provide the Marine Corps with the current DFAS performance measurement report, in some form, in the interim. Such an interim report would provide the Marine Corps with at least some insight into DFAS performance at a negligible cost to DFAS.

3. Request for Quarterly Performance Measurement Report

It is recommended that the Marine Corps provide DFAS a request for a quarterly performance measurement report reflecting Marine Corps requirements and preferences for performance measures and indicators, data definitions, and report format. This request will serve notice to DFAS as to anticipated customer service criteria and will assist DFAS in developing a performance measurement system with the capability to meet Marine Corps requirements.

4. Request for Development of Integrated Performance Measurement System

It is recommended that the Marine Corps formally request DFAS to begin development of an integrated performance measurement system in an effort to provide performance measurement reporting at the earliest possible date.

5. Request for Establishment of Joint Process Action Team to Develop Performance Measures/Indicators, Data Definitions, and Report Format

It is recommended that the Marine Corps request a joint process action team be established consisting of knowledgeable Marine Corps customers and DFAS personnel to develop performance measures and indicators, data definitions, report formats and other reporting requirements. This forum will permit communication and the exchange of information necessary for DFAS to develop the effective and efficient performance measurement system required to meet the needs of the Marine Corps, and by example, the other military services.

6. Educate Marine Corps Comptrollers on Performance Measurement

It is recommended that an effort be made to educate Marine Corps Comptrollers on the concept and principles of performance measurement and how they apply to the GPRA and DFAS. This education is necessary in order to decrease the amount of difficulty anticipated to be encountered in complying with the requirements of the Government Performance and Results Act. To help accomplish this task, it is suggested that the topic of performance measurement be added to the curricula of the Practical Comptrollership and Advanced Practical Comptrollership courses taught at the Naval Postgraduate School. Other efforts to accomplish this task should be developed by Marine Corps Headquarters.

E. FUTURE RESEARCH SUGGESTIONS

The concept of performance measurement is relatively new to the public sector and therefore provides many opportunities for future research. Concentrating on the issue of DFAS performance, the following research topics are suggested:

1. Cost-Benefit Analysis of Performance Measures and Indicators

A follow-on study to this thesis is needed to determine the optimum number of performance measures and indicators to be monitored and reported. In addition, a cost-benefit analysis of collecting and reporting performance measures and indicators would be helpful. Research on this topic would be useful to ensure that the cost of obtaining performance data does not outweigh the benefit to the military departments and services.

2. Comparison of Pre-DFAS and Post-DFAS Service Costs

Analysis of the cost, that the Marine Corps and other military departments and services, incurred providing their own finance and accounting services prior to the establishment of DFAS, as compared to the cost that DFAS charges the Marine Corps, or other services, for finance and accounting services currently is needed. This

topic is made challenging by the difficulty of identifying and allocating the various direct and indirect costs associated with finance and accounting operations prior to DFAS, e.g., what portion of the base fire department's cost should be allocated to the finance and accounting operations at each base or station? This topic is of importance to determine if the establishment of DFAS has resulted in an actual financial savings to the Department of Defense.

3. Analysis of DFAS Labor Costs

Analysis of the increased labor costs incurred by DFAS subsequent to its establishment is desirable. It appears that the number of personnel and the associated labor costs that DFAS actually incurred after capitalization may be greater than the proposed number of personnel and the associated labor cost. This topic is of interest to the military departments and services based on a perception that the services are being billed for DFAS personnel investments in addition to fees paid for services rendered.

LIST OF REFERENCES

1. Defense Finance and Accounting Service, *Implementation Plan For Consolidation of DoD Accounting and Finance Operations*, Defense Finance and Accounting Service, July 1992.
2. Louthain, J. A., *Measuring Improvement*, pp. 4-6, DFAS: The DoD Accounting Firm, Vol. 2, No. 1, January 1995.
3. Brancato, C. K., *New Corporate Performance Measures*, The Conference Board, 1995.
4. Public Law 103-62, *Government Performance and Results Act of 1993*, 103d Congress, 1993.
5. Joyce, P., *A CBO Study: Using Performance Measures in the Federal Budget Process*, Congressional Budget Office, July 1993.
6. Defense Finance and Accounting Service, *List of Performance Measures/Indicators*, Defense Finance and Accounting Service, October 1995.
7. Defense Finance and Accounting Service, *Data Definitions for Performance Measures/Indicators*, Defense Finance and Accounting Service, October 1995.

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